



# START

0018661

9200516

## Department of Energy

Richland Operations Office  
P.O. Box 550  
Richland, Washington 99352

JAN 16 1992

92-RPB-006

Mr. Timothy L. Nord  
Hanford Project Manager  
State of Washington  
Department of Ecology  
Mail Stop PV-11  
Olympia, Washington 98504-8711

Mr. George B. Schlender, Director  
Larger Onsite Sewage Systems  
State of Washington  
Department of Health  
West 924 Sinto  
Spokane, Washington 99201

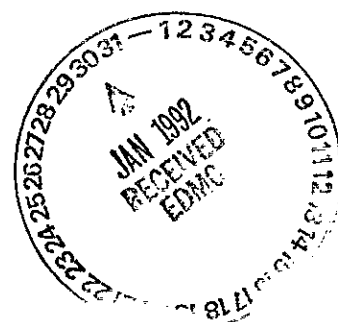
Dear Messrs. Nord and Schlender:

CONSTRUCTION SPECIFICATION, PLANS, AND ENGINEERING CHANGE NOTICE FOR  
PROJECT W-172, "272-AW SEPTIC AND DRAINFIELD REPLACEMENT"

This letter transmits the construction specification, plans, and engineering change notice required to construct a new septic tank and drainfield in the 200 East Area of the Hanford Site. The documentation is being submitted as requested by Mr. Schlender on December 19, 1991. This letter also transmits a copy of the telephone conference memorandum, dated December 19, 1991, documenting Mr. Schlender's request.

Project W-172 proposes to replace the septic tank and drainfield in the 200 East Area at 272-AW. The existing drainfield is plugged, and the 5,000-gallon septic tank must be pumped daily. Project W-172 proposes to install a system large enough to handle current staff, a proposed expansion to the 272-AW Building, and an additional office building.

The construction specification, plans, and engineering change notice are being forwarded for informational purposes. Upon receiving this documentation, a telephone conference will be scheduled. The enclosed was prepared by Kaiser Engineers Hanford.



Messrs. Nord and Schlender

- 2 -

JAN 16 1992

If you have any questions regarding this transmittal, please contact me or Mr. S. D. Stites of my staff on (509) 376-8566.

Sincerely,

*Robert S. Holtz*  
R. D. Izatt, Program Manager  
Office of Environmental Assurance,  
Permits, and Policy

## Enclosures:

1. Construction specification, plans,  
and engineering change notice.
2. Telephone Conference Memorandum.

cc w/encs:

R. E. Lerch, WHC  
R. W. Oldham, WHC

1212.930963

## TELEPHONE CONFERENCE MEMORANDUM

Company: Westinghouse Hanford Company      Address: P.O. Box 1970 Richland, WA 99352  
[ ] INCOMING      [X] OUTGOING      DATE: December 19, 1991      TIME: 3:00 p.m.  
WITH: Mr. George B. Schlender      OF: DOH      PHONE: (509)456-2490  
WITH: Ms. S. D. Bolling      OF: WHC      PHONE: 376-9876  
      Ms. K. S. Jensen      WHC  
      Mr. T. W. Moon      WHC  
      Mr. C. S. Mortimer      KEH

Copies to:

Name	Address
J. D. Axford	E6-04
A. W. Akerson	E6-25
D. L. Fort	E6-50
C. J. Geier	B2-19
B. C. Harmon	N1-30
R. L. Ingram	S1-06
L. A. Jeppson	N1-30
R. L. Newell	E6-31
R. W. Oldham	H4-57
S. M. Price	H4-57
C. G. Stites	R3-49
S. D. Stites	A5-19
D. J. Tollefson	N1-30
J. E. Witherspoon	R3-47
R. M. Yanochko	N1-30
SDB:KSJ/FILE/LB	H4-57

Subject: SEPTIC PROJECT STATUS AND TECHNICAL QUESTIONS REGARDING PROJECT W-172

Environmental Permits Section	S. D. Bolling	<i>Shirley D. Bolling</i>	372-0863
Environmental Permits Section	K. S. Jensen	<i>Kathy S. Jensen</i>	376-5616
Department	Signature		Telephone #

### Summary of Conference

#### 1. Current status of outstanding projects:

##### W-172:

Bids for this project have been opened and construction is almost ready to begin. Mr. George Schlender discussed his concerns based on his first cut review of the Engineering Report. He requested we consider the following points:

- In order to avoid the necessity of a waiver request, the contract needs to specify the elevation of the bottom of the drain field. This may necessitate additional excavation and disposal of excess material. In accordance with the soils report, Type 2 soils are encountered at approximately a four foot depth. If the contract has a provision for unit prices, the potential additional excavation would not present a problem.
- With the Type 2 soils, the dose to volume ratio (DVR) of 6.59 is too low. Mr. Schlender prefers a DVR of 7 or greater and would prefer to see four doses per day. He suggested a split manifold to shorten the lateral lengths and in turn reduce the lateral size.
- Mr. Schlender's review of the specifications contained in the Engineering Report posed the following comments and questions:
  - The septic tank plans need to be submitted to Mr. Schlender for approval. Mr. Schlender pointed out that pre-cast tanks of this size are not pre-approved by the Benton-Franklin Health Department. He is aware that there are only two suppliers in the state capable of supplying tanks of this size.
  - Prior to final acceptance, the septic tank will require a leak test.
  - Mr. Schlender noted the requirement for his presence during the initial pressurization of the drain field. Mr. Charles Mortimer informed him the final bid documents provide for this requirement.
  - In addition to pump hour meters, Mr. Schlender would like event counters on each of the pumps. He would also like the pump panel to have the capability to have a timer installed in the future in order to dose the beds on a set interval as opposed to dosing strictly on a volume basis.
- We discussed the filter as shown on the plans. Based on his preliminary letter on L-092, Mr. Mortimer informed him that the filter shown on the plans is being replaced with in tank filters similar to Zabel. He pointed out the need for an extension on a Zabel filter to insure the effluent is being withdrawn from the clear space in the septic tank.

- Mr. Schlender will require threaded caps on the ends of the laterals. He would prefer an elbow and an extension above the surface. At minimum he requires a marker at the end of each lateral for ease of location for future maintenance.
- Mr. Schlender needs a final bid document, which will be provided.
- Mr. Schlender will require a more detailed O&M manual which will detail exact procedures and frequency of each maintenance event.

L-092:

Mr. Schlender was informed that he would soon be receiving the 40 percent complete definitive design for this project.

W-219:

Mr. Schlender was given a "heads up" that he would soon be receiving the completed design for this project. We informed him that there were some questions regarding the existing design. Upon receiving this documentation a telephone conference would take place.

W-011H:

Mr. Schlender was told that he would soon be receiving this engineering report. This project has also gone out for bid, and faces the same potential problems as Project W-172 regarding the awarding of the contract prior to receiving written approval from DOH.

B-503:

Mr. Schlender stated that "someone named Meier contacted me regarding the Decontamination Laundry Facility, and it confused me a little." We requested that he hold onto the information submitted. We also gave him a "heads up" that he will be receiving the preliminary report through the proper channels. It should be noted that any communication and/or correspondence must be routed through RL and coordinated by the Environmental Permits Section.

## 2. Schedules for upcoming projects:

We informed Mr. Schlender that we are still working on a schedule for upcoming septic projects, which he can utilize.

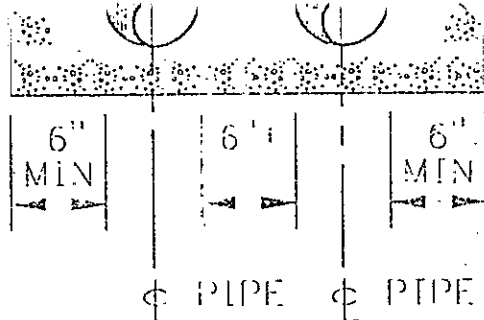
## CORRESPONDENCE DISTRIBUTION COVERSHEET

Author	Addressee	Correspondence No.
S. D. Bolling, 372-0863	T. L. Nord, Ecology G. B. Schlender, DOH	Incoming:9200516 Reference:9250145D

Subject: CONSTRUCTION SPECIFICATION, PLANS, AND ENGINEERING CHANGE NOTICE FOR  
PROJECT W-172, "272-AW SEPTIC AND DRAINFIELD REPLACEMENT"

### INTERNAL DISTRIBUTION

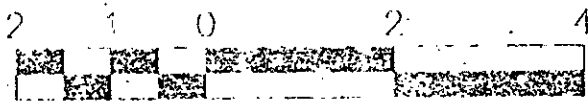
Approval	Date	Name	Location	w/att
		Correspondence Control	A3-01	
		S. D. Bolling	H4-57	
		G. D. Carpenter	B2-16	
		C. K. DiSibio	B3-03	
		C. J. Geier	B2-19	
		K. S. Jensen	H4-57	
		R. E. Lerch, Assignee	B2-35	
		P. J. Mackey	B3-15	
		H. E. McGuire, Level I	B3-63	
		S. M. Price	H4-57	
		R. W. Oldham	H4-57	
		C. G. Stites	R3-49	
		EDMC	H4-22	
		Project Files	R1-28	
		FILE/LB	H4-57	



CL OF SOUTH PIPELINE  
IS USED FOR DIMENSION  
CONTROL

B

# TYP MULTIPLE PIPE TRENCH SECTION



SCALE: 1/2" = 1'

DOES NOT CONTAIN CLASSIFIED OR  
UNCLASSIFIED CONTROLLED  
NUCLEAR INFORMATION

Reviewing Official/ADC  
Kaiser Engineers Hanford Company

Date

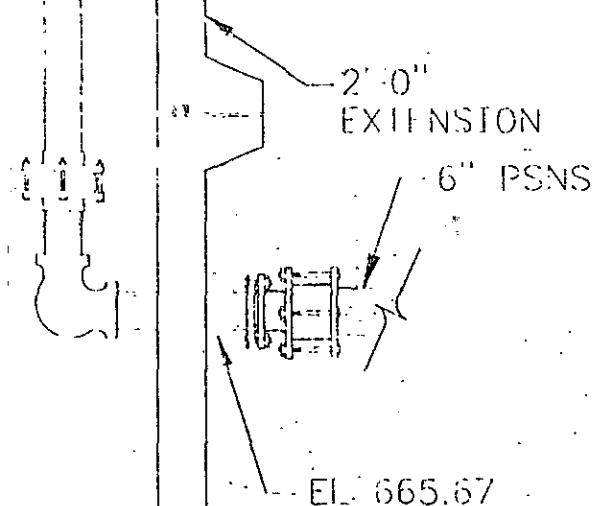
9/19/91

11/10/91	12/1/91	12/1/91	12/1/91
JA 3/3/91	SDC 9/1/91	WIL 1/3/91	CSM 9/3/91
RWL 9/4/91			
APVD FOR IMPL/INC FOR DATE			

DR. WN	BA LORENZO	DATE	9-18-90
CHECKED	DL FORT	DATE	11-8-90
SAILTY	D LUNDGREN	DATE	11-8-90
ENVIR	SD CONSORT	DATE	11-9-90
QE	TC OTEN	DATE	11-9-90
LEAD ENG APVD	CS MORTIMER	DATE	11-9-90
APPROVED FOR IMPLEMENTATION			
BY	RI INGRAM		
FOR	WHC	DATE	11-9-90

IMPACT LEVEL	4	EDT	118432
U.S. DEPARTMENT OF ENERGY RICHLAND OPERATIONS OFFICE KAISER ENGINEERS HANFORD COMPANY			
M CIVIL/DWG LIST SEWAGE DISPOSAL SYSTEM PLAN & DETAILS			
PROJECT W-172 (W-158) 272AW BLDG - SEWAGE DISPOSAL SYSTEM			
SIZE	BLDG NO.	INDEX NO.	DWG NO.
F	272AW	0400	H-2-82091
SCALE SHOWN			REV. NO.
JOB NO. ER1819 (ER0285)			2
SHEET 1			OF 1

J: LBM: ACD2: 10.0: NN



4. FLEXIBLE COUPLINGS SHALL BE INSTALLED AS SHOWN WITHIN 1' 6" OF THE VAULT WALL.
5. FASTEN METAL TAGS TO EACH VALVE WITH THE VALVE NUMBER ENGRAVED ON THE TAG.
6. VALVE VAULT ELEVATIONS ARE BASED ON AERIAL PHOTOGRAPHY CONTOUR MAPS. FINAL ELEVATIONS TO BE CONFIRMED AT THE TIME OF CONSTRUCTION.
7. VACUUM BREAKER SHALL BE PVC WITH VITON SEALS, 1" PIPE SIZE WITH AN OPERATING PRESSURE OF 100 PSI AND RESPOND (OPEN) TO APPROX 1" Hg VACUUM. HARRINGTON PLASTICS CAT #204VPM100V-PV

DOES NOT CONTAIN CLASSIFIED OR  
UNCLASSIFIED CONTROLLED  
NUCLEAR INFORMATION

Reviewing Official/ADC  
Kaiser Engineers Hanford Company

Date

9/19/91



JA 9/2/91	SDC 9/3/91	CSM 9/3/91	RWI 9/4/91
APVD FOR IMPL/INC FOR DATE			

ACD2:10.0:NN

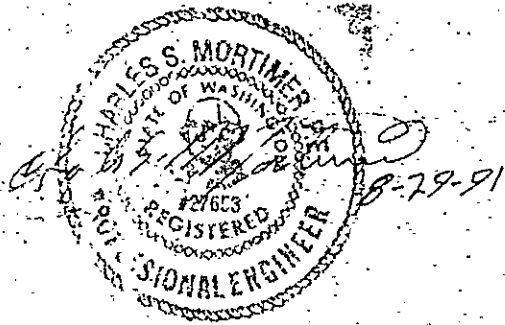
DRAWN	BA LORENZO	DATE	9-20-90
CHECKED	DL FORT		11-8-90
SAFETY	D LUNDGREN		11-8-90
ENVIR	SD CONSORT		11-9-90
OE	TC OTEN		11-9-90
CAD ENG APVD	CS MORTIMER		11-9-90
APPROVED FOR IMPLEMENTATION			
BY	RI INGRAM		
FOR	WHIC	DATE	11-9-90

IMPACT LEVEL		4		EDT		118432	
U.S. DEPARTMENT OF ENERGY							
RICHLAND OPERATIONS OFFICE							
KAISER ENGINEERS HANFORD COMPANY							
M				CIVIL			
SEWAGE				DISPOSAL SYSTEM			
DETAILS							
PROJECT W-172 (W-158) 272AW BLDG SEWAGE DISPOSAL SYSTEM							
SIZE	BLDG NO.	INDEX NO.	DWC NO.	REV NO.			
F	272AW	0400		H-2-82092		2	
SCALE	SHOWN		JOB NO.	ER1819 (ER0285)		SHEET	1 OF 1

KEICAD



1. TOP OF MANHOLE ELEVATIONS ARE APPROXIMATE. ADJUST TOP OF MANHOLE SUCH THAT COVER IS 3± INCHES ABOVE SURROUNDING GRADE.
2. VERIFY EXISTING INVERT ELEVATIONS PRIOR TO CONSTRUCTING NEW ITEMS. ELEVATIONS THAT VARY GREATER THAN 0.05 FEET SHALL BE EVALUATED BY DESIGN PRIOR TO CONTINUANCE OF CONSTRUCTION.



DOES NOT CONTAIN CLASSIFIED OR  
UNCLASSIFIED CONTROLLED  
NUCLEAR INFORMATION

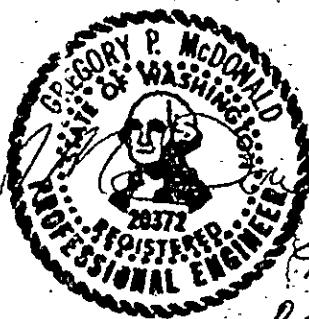
*E. C. White*  
Reviewing Official/ADC  
Kaiser Engineers Hanford Company

Date *8/30/91*

APV	9/1	11/19/91	APV
OC	9/1	9/1/91	
KEH APPROVALS	APVD FOR IMPL/INC FOR DATE		
ACD2:10.0:NN			

DRAWN BA LORENZO		DATE 9-20-90		IMPACT LEVEL 4		EDT 118432	
CHECKED DL FORT		11-8-90		U.S. DEPARTMENT OF ENERGY RICHLAND OPERATIONS OFFICE KAISER ENGINEERS HANFORD COMPANY  CIVIL SEWAGE DISPOSAL SYSTEM PROFILE			
SAFETY D LUNDGREN		11-8-90					
ENVIR SD CONSORT		11-9-90					
QE TC OTEN		11-9-90					
LEAD ENG APVD CS MORTIMER		11-9-90					
PROJECT W-172 (W-158) 272AW BLDG - SEWAGE DISPOSAL SYSTEM				REV NO.			
SIZE		BLDG NO.		INDEX NO.		DWG NO.	
F 272AW		0400		H-2-82093		1	
SCALE		SHOWN		JOB NO. ER1819 (ER0285)		SHEET 1 OF 1	
APPROVED FOR IMPLEMENTATION							
BY RI INGRAM		DATE 11-9-90					

MOUNT (1) INSULATED WIREHOLDER (CLEVIS AND BRACKET) ON EACH OF  
EXISTING POLES, EXCEPT MOUNT (2) ON EXISTING POLE #E1297. INSTALL  
FORMED SERVICE-GRIP DEAD-END ON THE INSULATED WIREHOLDERS AT  
ING POLES #425 AND #E14/4, AND (2) ON EXISTING POLE #E1297 TO  
RT THE BARE GROUND MESSENGER WIRE.



9/26/91  
REV 2

DOES NOT CONTAIN CLASSIFIED OR  
UNCLASSIFIED CONTROLLED  
NUCLEAR INFORMATION

Reviewing Official/ADC  
Kaiser Engineers Hanford Company

9/26/91  
Date

KN	9/3/91	9/3/91	RWL	9/3/91
JA	9/3/91	HW	9/3/91	
SDC	9/3/91	GPM	9/3/91	
RKN		RKN		
KEH APPROVALS				APVD FOR IMPL/INC FOR DATE
BM:ACD2:10.0:NN				

DRAWN	GL AVERY	DATE	
CHECKED	RK NEWHOUSE	10-25-90	
SAFETY	J ARCHIBALD	11-7-90	
ENVIR	SD CONSORT	11-7-90	
GE	SCOTT A RICHEY	11-7-90	
LEAD ENG	APVD RK NEWHOUSE	10-25-90	
APPROVED FOR IMPLEMENTATION			
BY	RL INGRAM		
FOR	WHC	DATE	11-9-90

IMPACT LEVEL	EDT	118432
U.S. DEPARTMENT OF ENERGY		
RICHLAND OPERATIONS OFFICE		
KAISER ENGINEERS HANFORD COMPANY		
ELECTRICAL		
PARTIAL SITE PLAN &		
ONE-LINE DIAGRAM		
PROJECT W-172 (W-158) SANITARY SEWER DOSING PUMPS		
SIZE	BLOC NO.	INDEX NO.
F	272AW	7201
		7301
SCALE	SHOWN	JOB NO. ER-1819 (ER-0285)
		SHEET 1 OF 1
		REV NO. 2

KEH200ECAD